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August 10, 2007

Mary D. Nichols Chairman, California Air Resources Board 1001 I Street Sacramento, CA 95814

RE: Proposed modified amendments to the Zero Emission Bus Regulations

Dear Ms. Nichols,

The Orange County Transportation Authority (OCTA) appreciates the opportunity to comment on the proposed modified amendments to the Zero Emission Bus (ZBus) Regulations published on July 27, 2007.

As you know, transit agencies are on the leading edge of the development of alternative-fuel technologies. The OCTA Board of Directors mandated the purchase of alternate fuel buses in October 1998. Today, OCTA operates 42 percent of its fleet with alternate fuels. The fleet purchase plan adopted by the Board of Directors in 2006 stipulates 91 percent of the fleet will be alternate fuel by 2010 and 100 percent alternate fuel by 2013. Currently, OCTA is in the process of receiving 299 compressed natural gas buses, which represents 95 percent of the fleet.

Because of our aggressive approach to alternate fuels, the OCTA has reduced fleet emissions by 730 tons of oxides of nitrogen (NOx), a 65 percent reduction, since 2001, and with the purchase of 400 alternative fuel buses by 2010, emissions savings will exceed 300 tons of NOx per year, a 90 percent reduction over ten years. These significant reductions come at a time when the OCTA fleet has projected growth of 15 percent.

We are, however, concerned with the effects the proposed modified amendments have on the implementation criteria for fuel cell buses. The California Air Resources Board's (CARB) estimated purchase cost for a fuel cell bus is 1.25 times more expensive than an electric trolley bus. This cost target does not adequately demonstrate the cost comparison of a fuel cell bus, which can cost more than twice that of an alternate fuel bus if these modified amendments are approved.

Based on the fuel cell durability criteria, the fuel cell would have to be replaced every 20,000 hours. The Federal Transit Administration's (FTA) mandates 12- year/500,000 mile life requirements for our buses. Therefore, fuel cells would have to be replaced twice during the life of a bus. Currently, we only

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replace the engine once during the life of the bus, at a cost of \$50,000. The cost to replace a fuel cell, on the other hand, is nearly 20 times more than an alternate fuel vehicle engine. We suggest a 1.25 cost factor for the replacement of the fuel cell, which will adequately represent the true costs in relation to that of an alternate fuel engine and would be similar to the overall purchase price of the bus.

We hope CARB will recognize that transit agencies have a responsibility to meet the current and future demands of their customers at a reasonable cost that the customer base can afford. With the high cost and low reliability that currently exists with the current ZBus technology, we simply cannot provide that guarantee to our ridership at this time. In addition, the high cost will result in deferred retirement of older buses, thereby hurting air quality. Reasonable standards for cost, reliability, and availability need to be in place before agencies can be expected to begin purchasing the technology. OCTA hopes that these factors are taken into consideration by the July 2009 review date when deciding to proceed with implementation or to adjust the requirements for ZBus technology.

The July 2009 review date will allow all parties to evaluate important information on the progress of ZBus technology and address any concerns during the development stages. OCTA looks forward to ensuring that the key concerns regarding affordability and reliability are thoroughly evaluated as staff completes its evaluation and provides recommendations to the Board.

Thank you for the opportunity to provide comments on the proposed regulations. OCTA looks forward to continuing to collaborate with CARB to promote technologies that allow us to provide cost-effective, reliable, and safe transportation to our customers while doing our part to improve California's air quality.

Sincerely,

Arthur T. Leahy

Chief Executive Officer

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c: CARB Board Members
Tom Cackette, Acting Executive Officer
Robert J. Gore, Deputy Cabinet Secretary, Office of the Governor